

REMARKS

Claims 1-18 were presented for examination. The Office Action dated February 10, 2005 rejects claims 1-18. This paper amends claims 1, 7, and 13 and adds new independent claim 19 and dependent claim 20. Support for the amendments can be found in general throughout the specification and drawings and, in particular, on page 5 of the specification. Claims 1-20 are now pending in the application. Applicants' also amended the Abstract to correct a typographical error.

Rejection of Claims 1-5, 7-11 and 13-17 under 35 U.S.C. 102(e)

The Office Action rejects claims 1-5, 7-11 and 13-17 under 35 U.S.C. 102(e) as anticipated by Birenbach (U.S. Patent No. 6,594,704). Applicants respectfully traverse the rejection because Birenbach does not disclose every element and limitation of the Applicants' invention as now claimed.

As now set forth in representative claim 1, the Applicants' invention routes a packet received from one of a plurality of domains. A separate routing table is dedicated to each domain of the plurality of domains for use in routing packets propagating that domain. As described in paragraph 29 of the Applicants' specification, the use of separate routing tables advantageously prevents routing information for one domain from being seen by another domain, thus assuring privacy. The packet arrives through one of a plurality of

interfaces. One of the routing tables is determined for the packet. This determination occurs according to a mapping array of pointers. These pointers associate the interfaces with the routing tables.

In contrast to the plurality of *dedicated, separate* routing tables of the Applicants' invention, Birenbach discloses a method of managing multiple virtual private networks (VPN) using a *single* routing table, called a global routing table. Granted, Birenbach does mention multiple routing tables, however, these routing tables are no longer separate when combined to form the single global routing table. Rather, by being integrated into the single global routing table, the multiple routing tables share the same table space.

Birenbach's reason for combining the multiple routing tables into a single global routing table is to avoid fragmentation and inefficient use of memory space associated with individual routing tables (col. 2, lines 44-51 and col. 4, lines 16-29). However, by employing only one global routing table to serve all VPNs, Birenbach potentially creates the very condition that the Applicants' claimed invention expressly seeks to avoid by having separate routing tables: namely, that the shared table space may permit routing information of one domain to be seen by another domain. This tradeoff between separate routing tables illustrates an appreciable distinction

between the Applicants' dedicating of a separate routing table for each domain and Birenbach's use of a single routing table to serve all VPNs.

Moreover, Birenbach does not disclose or suggest a mapping array as set forth in the Applicants' claimed invention. The mapping array plays a role in determining which separate, dedicated routing table is to be used when routing an incoming packet. As described in the Applicants' specification, a device that receives an incoming packet is an interface, and the incoming packet becomes associated with the interface through which it is received. The mapping array has pointers that associate these *interfaces with the routing tables*, so that a determination of which routing table to use for the incoming packet can be made.

The Office Action suggests that Birenbach's global routing table corresponds to the Applicants' mapped array. Unlike the Applicants' claimed invention, however, Birenbach's global routing table does not have pointers that associate interfaces with routing tables. Rather, the global routing table has table entries that, in effect, associate the VPNs of incoming packets with routes to be taken by those packets. When a packet arrives, the VPN ID associated with the packet is combined with part of the packet's destination address. This combination (i.e., a key) serves to select a particular entry of the global routing table from which a route (e.g., address of the next hop) can

be obtained. Thus, in Birenbach, associations are made indirectly between VPNs and routes, and not between interfaces and routing tables as set forth in the Applicants' claimed invention.

Therefore, Applicants' respectfully submit that Birenbach does not anticipate or suggest the Applicants' claimed invention because Birenbach fails to disclose a separate routing table dedicated to each domain and mapped array, as set forth in the Applicants' claimed invention. Consequently, Applicants respectfully submit that the rejection to the claims is overcome.

Independent claims 7, 13, and newly added claim 19 recite language similar to the language recited in claim 1. Therefore, these independent claims are also patentably distinguishable over Birenbach for at least those reasons provided in connection with claim 1. In addition, dependent claims 2-5, 8-11, 14-17 and 20 depend directly or indirectly from patentable independent claims 1, 7, 13, and 19, and incorporate all of their respective limitations, and therefore are also patentably distinguishable over the cited references for at least those reasons provided in connection with those independent claims. Therefore, the Applicants respectfully submit that the rejection against these claims is also overcome.

Rejection of Claims 5, 11, and 17 under 35 U.S.C. 103(a)

The Office Action rejects claims 5, 11, and 17 under 35 U.S.C. 103(a) as being obvious over Birenbach in view of RFC 1247 by Moy. In describing an Open Shortest Path First internet routing protocol, RFC 1247 discloses a technique for updating a route in a routing table. Like Birenbach, however, RFC 1247 does not disclose or suggest dedicating a separate routing table with each domain of a plurality of domains, or a mapped array for associating interfaces with the routing tables. Applicants therefore respectfully traverse this rejection because the cited references, whether taken alone or in combination, do not teach or suggest every element and limitation of the Applicants' invention as now claimed.

CONCLUSION

In view of the amendments and arguments made herein, Applicants submit that the application is in condition for allowance and requests early favorable action by the Examiner.

If the Examiner believes that a telephone conversation with the Applicant's representative would expedite allowance of this application, the Examiner is cordially invited to call the undersigned at (508) 303-2003.

Authorization is hereby granted to apply any credits or fees due in this case not covered by check to Deposit Account 50-2295.

Amendment and Response

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Respectfully submitted,

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